## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,842	07/15/2003	Nigel Evans	07319-091002	8792
20985 FISH & RICHA	7590 02/28/2007 ARDSON PC	02/28/2007 EXAMINER		
P.O. BOX 1022			CHARLES, MARCUS	
MINNEAPOLI	S, MN 55440-1022		ART UNIT PAPER NUMBER	
			3682	
		7-7-0		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
2 MOI	SHTIN	02/28/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.usplo.gov

## **MAILED**

FEB 2 8 2007

## **GROUP 3600**

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/620,842

Filing Date: July 15, 2003 Appellant(s): EVANS, NIGEL

> Scott C. Harris For Appellant

#### **EXAMINER'S ANSWER**

This examiners answer in response to the return order of 9/11/2006, the supplemental appeal brief of 2/24/2006 and the appeal brief of 6/07/2005 appealing from the Office action mailed 12/07/2004. The supplemental appeal brief of 2/24/2006 appears to be identical of the appeal brief of 6/7/2005 except for the addition of an evidence appendix and a related appeals appendix. This examiner answer corrects the errors noted in the

Art Unit: 3682

return order of 9/11/2006 and therefor, the examiner's answer 8/25/2005 is hereby VACATED and replaced with this examiner's answer.

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. In addition to the ground of rejection stated by the appellant a new ground of rejection has been entered and a double patenting rejection of 12/07/2004 has been withdrawn.

Art Unit: 3682

## **NEW GROUND(S) OF REJECTION**

## Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 14, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Cleveland. In claims 11, 14 and 15, Cleveland discloses a system (10), comprising a movable device (36), which is a pulley adjacent a heat source (16), to control an object (the shutter) that is placed adjacent a heat source; the movable device is controlled and is connected to a motor (30) and rotating to control an object, a motor (30) on a first side of the pulley and away from the heat source, a belt (32) maintained on a side of the movable device which is distance from the heat source. It should be noted that when the belt is in the groove of the pulley, the section of the groove above the belt will always be closer to the heat source than that belt.

In claim 14, note the color changer (20), which is moved to change the color of the light beam.

In claim 17, it is apparent the movable device can be construed to be the pulley plus the shutter combination, and the belt is maintained at all times in the groove of the pulley. It should be noted that when the belt is in the groove of the pulley, the section of the movable device that protrudes above the belt will always be closer to the heat source than the belt.

Art Unit: 3682

#### WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1- 23 of U.S. Patent No. 6,592,480. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are obvious variations in the breath and scope.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

2,753,812	Wharton	07-1956
4,161,000	Cleveland	01-1979
4,231,643	Demick et al.	11-1980

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 14, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Cleveland. In claims 11, 14 and 15, Cleveland discloses a system (10), comprising a movable device (36), which is a pulley adjacent a heat source (16), to control an object (the shutter) that is placed adjacent a heat source; the movable device is controlled and is connected to a motor (30) and rotating to control an object, a motor (30) on a first side of the pulley and away from the heat source, a belt (32) maintained on a side of the movable device which is distance from the heat source. It should be noted that when the belt is in the groove of the pulley, the section of the groove above the belt will always be closer to the heat source than that belt.

In claim 14, note the color changer (20), which is moved to change the color of the light beam.

Art Unit: 3682

In claim 17, it is apparent the movable device can be construed to be the pulley plus the shutter combination, and the belt is maintained at all times in the groove of the pulley. It should be noted that when the belt is in the groove of the pulley, the section of the movable device that protrudes above the belt will always be closer to the heat source than the belt.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-9, 11-15 and 17, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleveland (4,161,000) in view of Wharton (2,753,812).

Cleveland discloses a system (10), comprising a pulley (36) adjacent a heat source (16), and rotating to control an object, a motor (30) on a first side of the pulley and away from the heat source, a belt (32) entrained around the frictional outer peripheral surface the pulley and connected to the motor shaft via a pulley. Cleveland does not disclose a belt redirecting mechanism holding the belt around the frictional surface of the motor pulley and a side of the driven pulley. Wharton discloses a redirecting mechanism holding a double-sided belt (26) between a motor and a driven pulley in order to achieve efficient power-take off without slippage, to reduce pressure on the belt during operation and to make it easier to provide proper tension on the belt. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the

Art Unit: 3682

Cleveland device to include the limitations of Wharton in order to achieve efficient power-take off without slippage, to reduce pressure on the belt during operation and to make it easier to provide proper tension on the belt

In claim 3, note the rotation device of Wharton include first and second idlers (22, 24) spaced from each other on opposite sides.

In claim 4, note the belt of Wharton includes a frictional surface on both sides.

In claim 5, note, the idlers are arranged to engaged the first side of the belt and the driven pulley are arranged to engage the second side of the belt.

In claims 6-9, note the light beam changing mechanism (18/20) of Cleveland and it is apparent that the light beam changing mechanism alters and changes the shape of the light.

Regarding claims 11-15, 17, it is apparent that the method steps are inherently included during the manufacturing of Cleveland in view of Wharton device.

Claims 10, 16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleveland in view of Wharton as applied to claim 1 above, and further in view of Demick et al. ('643). Cleveland does not disclose the intensity of the light. Demick discloses a light having an intensity of up to 1200 watts (which is greater than 300 W). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify Cleveland device to include a light intensity of Demick in order to provide proper illumination and to reduce time of heat concentration.

In claims 19-21, Cleveland in view of Wharton discloses the claimed invention above.

## (10) Response to Argument

Applicant contended that there is no incentive to modify the device of Cleveland to include a redirecting mechanism of Wharton. It should be noted that in a belt drive system, there is always an incentive to include a mechanism to tension the belt and to prevent slippage between the belt and the pulley, irrespective of the size and torque capacity. It should be noted that the system of Wharton would make the system of Cleveland more stable. Any system that is controlled by the speed of a motor requires a certain amount of torque. In most circumstances the speed and torque produce by a motor fluctuates and the design of the belt arrangement of Wharton would limit the effects of the fluctuations. Therefore, one of ordinary skill would use the Wharton arrangement to limit the effects of the fluctuations of the motor and thus proving stability for the system of Cleveland. In addition, after a duration, the belt will undergo friction wear and slippage will began to occur and further tensioning will be needed to prevent such slippage and to maintain the required to torque to keep the system in proper operation.

Regarding applicant's argument pertaining to claim 7, applicant contended that the changing mechanism of Cleveland is apparently a shutter. It should be noted that these shutters in combination with the lens (12) control the lights passing through the optical axis. It should be note that the color of the lights will inherently change as the light filters through. Regarding claim 17, it is apparent that the Wharton would inherently

allow the rotating system to be closer to the light than the belt. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the system of Wharton would improve the drive of Cleveland as stated above. Therefore, the combination of Cleveland and Wharton is proper.

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR

Art Unit: 3682

Page 11

41.39(b)(1) will be entered and considered. Any request that prosecution be reopened

will be treated as a request to withdraw the appeal.

(2) Maintain appeal. Request that the appeal be maintained by filing a reply

brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of

rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the

other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR

41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be

treated as a request that prosecution be reopened before the primary examiner under

37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO

MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to

reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex

parte reexamination proceedings.

Respectfully submitted

A Technology Center Director or designee must personally approve the

new ground(s) of rejection set forth in section (9) above by signing below:

Conferees:

C. Marmor CM

T. Hannon

Katherine Matecki ACTING DIRECTOR TC 3600

Art Unit: 3682

Page 12